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## PRIZE ESSAY.

On Mixed Farming, including the keeping of Live Stock, Poultry and the Dairy, and the producing of Fruit for the Market, with recommendations as to the best rotations of crops for the Southern Atlantic States from Maryland to South Carolina.

By AUBREY H. JONES, of Essex County, Virginia.

One of three essays awarded equal prizes by THE AMERICAN FARMER.

In response to the very liberal offer of the proprietors of THE AMERICAN FARMER of prizes for a series of essays upon the various systems indicated in its December number, I have decided to write an article upon number one, as delineated above; but before entering upon the subject in hand, I must be allowed to say that no system can be recommended to apply to either of the States above named in their entirety, but must be restricted to soils of similar formation and character. No system adapted to the Tidewater

Division, far less the Piedmont Section of these States. I shall therefore confine my treatise to the first named—the Tidewater Section of this country.

In recommending a system for this section, it must be remembered that these lands, with few exceptions, though originally fertile, have been worn down by excessive tillage; and it should be the aim of every proprietor to so manage his farm as to keep up a steady improvement consistent with reasonable returns. To this end, the farm should be so divided as to admit of frequent recurrence of green fallows as the most feasible mode of supplying vegetable matter. Take for example a farm of three hundred acres, forty acres of which should be in timber for fuel and building purposes, two acres for vegetable garden. This may be set out at convenient distances in small fruits for family use without interfering with its proper cultivation, such as strawberries, raspberries, currants, gooseberries, dwarf pears, quinces, plums and damsons. Six acres should be appropriated to a lawn. This should be well set in mixed grasses and a variety of shade trees tastefully arranged should be planted throughout its full extent. Nothing contributes more to the beauty and health of a homestead than such a lawn, while it may be made more profitable than a like number of acres in cultivation as a range for the poultry, and at times affording fine grazing for horses, calves and a few mutton. Two acres more should be appropriated to stock lots around the barn and truck patches, for farm use. Ten acres should be taken for an orchard of apples and peaches, and such varieties should be selected ripening in succession as best suited for market. This leaves two hundred and forty acres of land for cultivation, provided a standing pasture of fine grazing marsh is found on the tract, which is the case with most farms. On the

water courses, where this is not the case, forty acres with a stream running through it, if to be had, should be set apart as a permanent pasture. The remainder should be divided into five fields as nearly as possible of equal size—say of forty or forty-eight acres each. The fields should all connect, if practicable, with the barn. This can easily be done if the buildings are in the centre of the farm, otherwise they should be divided as to be as accessible as possible. The fields having been laid off should be fenced with a substantial enclosure, with gates at convenient points. To describe the system and mode of culture, I would number the fields 1, 2, 3, 4 and 5.

Field No. 1 comes in corn. I would recommend thorough plowing, but the soil should not be broken more than one half inch deeper than the usual shallow plowing ordinarily pursued. While deep plowing is advantageous in most soils, it should always be very gradual. After the field is broken up it should have several thorough harrowings and be gotten in as fine tilth as possible, for it is far better that half the work of the corn crop should be done before it is planted. I would recommend after the first harrowing the application to the land, broadcast (if in good heart) fifty bushels of lime; if poor, twenty-five or thirty; the additional harrowings will incorporate it with the soil. Oyster shells are to be had in Baltimore or Norfolk merely for the expense of removing them, and will be freighted along the bay or up the rivers contiguous as back loads by vessels for two cents per bushel. Nearly all the farmers in this Tidewater section have a surplus of wood; where this is the case I would recommend the purchase of these shells and burning them on the farm, which can be done in winter by the farm hands. A bushel of shells will yield, if properly burnt, one and one-fourth bushels of lime, so that the absolute cost would not exceed four cents per bushel for the lime slaked and ready for use. This, of course, would be recommended for farmers only on or near water courses. Where several miles distant marl would probably be cheaper and answer as well. Marl abounds in almost every neighborhood throughout the Tidewater section of these States.

Lime is the basis of all permanent improvement for this region and should be used regularly in the rotation. Field No. 1 should remain in corn stubble until the following spring, say May, then lightly flushed with the plow and seeded the last of May or first of June (oxen may be used to facilitate the work, if desired) in peas, (black or shirley), broadcast, from one to one and one-fourth bushels per acre. In the fall when ripe, enough should be picked for the next crop, and the hogs intended for pork should be allowed to follow the pickers a few hours each day with a boy to watch and keep them together; they are very fond of peas and in a few weeks will be nearly fit for pork, requiring very little corn to harden the flesh and fit them for the butcher. The field should then be fallowed and seeded in wheat with mineral phosphate (non-ammoniated),

as the peas will furnish sufficient ammonia for the crop of wheat. The following winter or spring clover should be seeded and allowed to stand until the next spring, which brings us to the fourth year, when I would advise the sowing of a bushel of plaster to the acre, say in February or March, and when the clover has made its full growth, which will be indicated by one-third of the heads turning brown, I would cut enough for hay for farm purposes and graze the balance with beef cattle to fit them for the June market. This field should be fallowed for wheat in the fall; the next year, after the wheat is taken off, this field should be grazed closely by all the stock on the farm, and in July and August all the manure and coarse litter should be spread on the thinner portions of this field preparatory to its coming in corn the next year, which is the sixth year.

This completes the rotation for this field; the same rotation is to apply to each of the others. It will be seen that we have one field in corn, two fields in wheat, one of which is on pea fallow, the other on clover; one field on pea fallow and one on clover, a sufficiency of the latter to be harvested for hay, the balance pastured. It will be observed that this system gives us two green fallows in five years. The pea fallow is a very cleansing one and fits the soil admirably for clover, which follows; this together with the manure on the farm will rapidly improve its condition. The corn fodder should be secured in good order and time, both blades and tops, for the stock on the farm, but when sufficient clover can be harvested the pulling of fodder may be dispensed with and the corn cut up in the fall with the fodder on it. An oat crop should be raised every year as a change of feed for work teams. Eight or ten acres of the corn stubble may be seeded, and when harvested this may be seeded in peas. By this system strictly carried out and by accumulating all the manure which can be raised, the farm will rapidly improve and the product increased form and at the beginning of the second rotation at least 25 to 50 per cent. and in some cases 100 per cent. When the farm has sufficiently improved to justify it, that is, the soil abounds in vegetable matter, the pea fallow may be abandoned and the corn stubble put in wheat, to be seeded the following spring in grass. This would give a two years' crop of grass, which would justify the mixing of the grasses, sowing orchard grass or timothy with the clover, which would greatly improve the hay as well as the pasture. It should be borne in mind that the most successful farming will always tend to the increase of the grass crop. It is an axiom which will not be denied, that where most grass abounds there most prosperity will be found, and *vice versa*. This being so, it should be the settled purpose of every farmer to bring his land up to that state where most of the land may be left in sod and but little cultivated. All the stock should be kept on the farm that can be properly cared for. Sheep are very profitable when well sheltered and fed in winter, while

their flesh affords a delicate and healthy dish. When penned at night and the pens well littered they will accumulate a large amount of valuable manure and are not so apt to be depredated on by dogs. Ten or twenty beesves should be fattened every winter and topped off in May on the clover field with corn, so as to fit them for the June market, as this is the best time to market them in this section, avoiding the flies and mosquitoes which greatly annoy them later.

A large surplus of pork should be raised, the marshes afford them fine pasture in winter and spring, and when the wheat crop is removed from the field they should have their noses ringed and turned in to glean the fields and allowed to remain until the pea fallow is ready for them, when they should go on this until the field is seeded in wheat, when they should be penned and fed corn a few weeks. By this means one barrel of corn would suffice to make one hundred pounds of pork. It should be the object of the proprietor to consume all the corn raised, which if judiciously done will pay him handsomely, say twice as much as if marketed. Poultry should be raised to the full extent of the proprietor's ability to keep them and well cared for, as nothing pays better. The dairy should have the same attention, as the surplus from these sources help materially to swell the farmer's revenue. The fruit trees, especially when young, should have close attention, be pruned regularly, cultivated and examined frequently for insects, which should be effectually destroyed. It would be well when the orchard is young to sow it every spring in peas, to be turned in in the fall; this would serve as a mulch and rapidly improve the soil. In conclusion, will say, I have been enabled only to touch upon many subjects which should have been more fully treated, but for want of space. The thoughtful farmer, however, will be enabled to pursue them to their legitimate results.

## Exports of Breadstuffs and Provisions.

The report of the bureau of statistics of export of breadstuffs shows that for ten months, ending April 30, the total value of exports was \$157,548 13 against \$225,150,795 for the ten months ending April 30, 1881. The falling off for April as compared with the corresponding month of last year has been more than one-half the value for April, 1882, being \$9,835,205 against \$20,041,008 in 1881. The comparison by quantity shows a more marked falling off than the comparison by value. In April, 1881, 7,360,000 bushels of Indian corn were exported, valued at \$4,251,000; in April, 1882, 1,999,000 bushels, valued at \$951,000. Of wheat, the total for April, 1881, was 10,632,000 bushels, valued at \$12,256,000; for April, 1882, 4,788,000 bushels, valued at \$5,583,000. Of wheat flour, the total for April, 1881, was 664,968 barrels, valued at \$3,729,525; for April, 1882, 486,319 barrels, valued at \$3,089,040.

Provisions, tallow and dairy products show a falling off similar to that of breadstuffs. For the twelve months ending April

30, the total value of dairy products exported was \$18,090,843, against \$23,336,352 for the preceding twelve months. The number of pounds of butter exported during the year ending last April was 16,985,289, against 35,637,433 for the preceding year. The figures are 186,241,919 pounds, against 145,579,812 pounds. In comparing the figures with regard to provisions for six months preceding April 30, 1832, with the corresponding period of the year before, there has been a falling off in every item except salted beef, in which there was a large increase, the figures being 28,554,288 pounds for the former period and 20,903,549 pounds for the latter. Giving round numbers, the exports of fresh beef has fallen off from 60 million to 34 million pounds, bacon from 424 million to 289 million, ham from 45 million to 18½ million, lard from 209 million to 134 million, pork from 65 million to 47 million, tallow from 41 million to 26 million. The difference in values is not so great as the difference in quantities, owing to the high prices prevailing, but for the two periods of six months there is a difference of nearly \$20,000,000 in value of the exports of the articles of provisions enumerated.

#### Jerusalem Artichokes.

While the general cultivation of this plant, for the tubers may not be desirable in some localities, and under some circumstances, it would prove, says the *Massachusetts Ploughman*, a valuable addition to the crops that are now grown as food for hogs.

The plant is very hardy, and produces fair crops on ordinary soils, and large crops on rich soils. Once planted, it will propagate itself. It is more nutritious than the potato, being very rich in sugar, is readily eaten by sheep, cattle and hogs. It grows best on a rich loam, where it yields a large crop, even if the land is partially shaded by trees. In fact, it seems to grow better in an orchard, where the soil is kept loose by shade, than in an open field, producing crops year after year without any labor except the first planting. When grown for hogs, to save the labor of digging, the hogs should be turned into the field to help themselves, which they readily do, but there will always be enough left to seed the land another year. Store hogs can thus be kept in a growing condition at a very trifling expense until the ground freezes; but the attempt should not be made to keep them entirely on the artichokes; it is good policy to give them some corn every day. By planting in an orchard, and giving the hogs the chance to gather the crop, the orchard is very much improved as well as the hogs.

This tuber also furnishes food for man, but cooked it is not equal to the potato, very few being fond of it. If pickled in cider vinegar, it makes a pickle that many are very fond of. When grown for pickles it should be planted in the garden, like potatoes, only it may be more heavily seeded. Planted in drills, the pieces should be from six to eight inches apart and the drills thirty inches apart. The plants should be kept well hoed that the tubers may grow quick and large. Those for winter use should be dug in the autumn, but those for spring use should be left in the ground over winter. When dug in the spring they should be at once put in the vinegar.

The one great drawback on the growing of the artichoke is the difficulty of eradicating it when once in the ground. Careless cultivation will not do it, but thorough cultivation for a single season will destroy it.

This is sensible, on general principles: The members of the Georgia Farmers' Club have resolved that none of them will plant more than one-third of their tilled land to cotton; the other two-thirds will be devoted to grain of different kinds.

#### Live Stock.

##### Large Flocks on Small Areas.

*Messrs. Editors American Farmer:*

In your issue of May 1st, appeared an article entitled "Advantages of Small Flocks," which raises and apparently settles adversely—a question of very great importance to owners of small farms of high-priced land, and especially to a large number whose lands owe their market value mainly to advantages of location, while their productive capacity may be quite inadequate to carry interest account upon the amount invested in them. To all such owners, some sure and cheap means of rapidly increasing and permanently maintaining the fertility of their lands, is an obvious necessity, in order that the margin between cost and value of production may be enlarged as quickly as possible, and the returns from their investment rest upon a permanently secure basis. Among several means of increasing fertility, none is at once so cheap, rapid and permanently effective, as barnyard manure, but most of us know that the improvement of any considerable area by this means within an ordinary lifetime, necessitates the keeping of a larger number of stock in proportion to area, than are now to be found on the majority of farms; hence the solution of the problem "How to keep large flocks on small areas," becomes a question of paramount importance, and upon this question the article above alluded to bears heavily.

The proposition embodied therein stated briefly is, that "whereas 5 sheep may be kept on 1 acre, 500 cannot be maintained on 100 acres without becoming diseased;" its author giving such reasons as show him to be a practical man, whose opinion is entitled to carry weight, though his conclusion may be, and, except under certain conditions, is incorrect. In venturing to hold the converse of a proposition maintained by very many practical and intelligent men, I do so, not merely for sake of argument, but with a view to elicit discussion, and the experience of others on a point of great importance, and general interest to the farming community, while contributing such light as I may be able from an experience of several years largely devoted to the testing of this very question. As a result of this experience, I am prepared to admit that a large flock on a small area, is not as easily maintained in a thrifty condition, as a small one on a large range; and that their liability to contract disease will also be greater when allowed to become unthrifty; but these are truisms self-evident to our common sense, and need neither argument nor experiment to demonstrate them. The point I wish to maintain is, that neither the unthrifty, or subsequently diseased condition must inevitably result from the massing together of large numbers of sheep on small areas, and that when it does occur, it is due to errors of management arising from an inadequate appreciation of several necessary conditions of success, or in other words is due to preventable causes.

The case supposed in the article referred to of 500 sheep turned into a 100 acre lot of good grass, is just such an instance; failing to provide any of the essential conditions, it would certainly lead to failure if attempted; but divide the 100 acres into 20 or 25 acre lots, to be fed off in rotation, and with a due amount of care and watchfulness the result will be different. The fact itself has been demonstrated to my own satisfaction so far as several years trial will go towards it, and the reasons for the division are founded in a study of the peculiar habits and instinct of the animals themselves. These instincts they in a natural state, or on comparatively large range, can indulge at pleasure, on small areas they can do so only at the will of their owner, and his success will largely depend on the provision made, and watchfulness ex-

ercised in catering to the recognized wants of their nature.

Among these is a habit of roaming over large surfaces without regard to the amount of grass within reach. This peculiarity needs to be restrained within narrower limits than is done on a 100 acre lot, otherwise they work too hard for their feed. Again every one who has had the care of sheep, must have noticed their remarkable desire for a frequent change of pasture, and knows that after being confined for some time on a good pasture, they will if possible break through a fence to get to a poorer one. This peculiar habit is very marked, and must receive practical recognition from the owner, or his sheep will soon become restless and obviously dissatisfied with their location. Loss of flesh follows.

The 100 acre lot fails to provide for this; their roving habit will carry them from end to end, and every corner of it several times a day, and no change is possible. Another special characteristic is their preference for short herbage; unless compelled, they will not eat grass of rank or medium growth; and here comes in one cause of failure on the 100 acre lot. On a field of that size, enough short grass can be found to supply the stock for a length of time, which permits the greater part of the grass in the field to become too long and rank to suit their dainty palates, and as this will increase with every succeeding day of the growing season, more and more time and labor is spent in searching for short grass and the young and tender shoots of that which has already been grazed, and a large proportion of the 100 acre lot is practically lost to the maintenance of the flock, resulting in a further loss of flesh from this cause.

By the plan of division into 4 or 5 fields instead of one, these special peculiarities of the sheep are recognized and provided for. First, their roaming habit is restrained within reasonable limits. Second, they can be turned into a fresh field as often as may be necessary to meet their desire for change, and prevent injury to the pasture from too close grazing; and thirdly, the lots being small will be grazed down closely and evenly, and when change has been given to each lot successively, the first will be ready again with a uniform growth of fresh and tender grass, and no part of the pasture is lost. In addition to these measures, ordinary prudence will dictate that not less than one-third of the permanent grass land of the farm, should be held in reserve for use in times of drought to be mown for hay when not needed for pasture.

In my own practice, by the use of portable fencing, one-half the grass land is grazed or mown on alternate years, thus holding always a good reserve, extending the durability of the grass, (which would run out more quickly by constant grazing), and at the same time diminishing the liability of the flock to parasitic diseases, which are well known to be of more frequent occurrence where sheep are pastured on the same land year after year. Supplement these measures by dipping at least once a year (twice is better), provide clear water and shade in each pasture with a lick of tar, salt and sulphur mixed, always within reach; commence with hardy native ewes and breed up; cull out annually all old and indifferent stock; be careful not to overstock your pastures; kill all dogs that come on the place, beginning with your own; exercise due vigilance in seeing that your stock reap the full benefit of the advantages provided for them, and then if your stock are young, thrifty and free from disease to start with, they will remain so.

As already intimated, this is not mere theory. Beginning with 50 sheep some years ago, 400 ewes and their lambs are now being kept on this system as follows: Upon one farm having 75 acres in grass, one-half is mown, and one-half grazed by 200 ewes and

their lambs. On an adjoining farm of poorer land, 70 acres of indifferent grass maintains 200 ewes and their lambs during the season from April to October inclusive. In one case the land devoted to grazing, carries over 5 sheep per acre; in the other, nearly 3 are carried from spring to fall, with their lambs in addition until they are sold off, and though I have lost a few at times by dogs, physical injury, old age and other causes, preventable or otherwise, I have not yet been able to discover that such losses were the inevitable result of keeping large numbers on small areas.

So far I have sought to indicate the necessary conditions of summer pasturing only, and with special reference to the sanitary influence of the system. The special winter management required; the manner and extent to which the profits of the flock may be affected by mere numbers; the relative merits of portable and permanent fencing as applied to this special business; the use of oil-cake or meal in connection with pasturing, and the minor details essential to the best results under this system, are all matters of vital interest on which I and many others are seeking the light; but the inevitable disease that must result from the massing of sheep in considerable numbers, has long been a bug-a-boo which has deterred many from practicing a system which would rapidly increase the fertility of their lands, and if with my feeble lance, I have endeavored to strike a blow at one of the many giants of tradition that have long stood in the way of agricultural progress, it has been with the hope and expectation that some abler and experienced pen may come up in time either to set him on his legs again forever, or give him the final *coup-de-grace*. B.

Virginia.

#### The Escutcheon.

*Messrs. Editors American Farmer:*

I promised your readers as well as myself that I would not again reply to Dr. Ellzey's articles on the "Escutcheon." But I cannot resist the temptation to place in juxtaposition, with some of his expressions, parts of Dr. Salmon's article in the *Breeders' Gazette* of April 20th, for which Dr. Ellzey, for reasons best known to himself, failed to quote, not only to show the disingenuousness of Dr. E.'s quotations but to show your readers that Dr. Salmon is not to be classed among the unbelievers in the escutcheon, as Dr. Ellzey's quotation might suggest.

Dr. Ellzey said in his second article: "It has been said that the same important artery supplies the hair glands of the backward growing hair of the Escutcheon and the lacteal glands. That thing is simply not the truth."

Dr. Salmon says: "In an article published in the *Country Gentleman*, August 7, 1879, I pointed out the fact, well known to all anatomists, that the mammary artery is prolonged between the thighs by a perineal branch, which terminates in the inferior commissure of the vulva, after having furnished glandular and cutaneous divisions. This language being very nearly that of Chanvian, in his standard work on the 'Anatomy of the Domesticated Animals.' Besides pointing out in this way that the hair on the Escutcheon grows in the same direction as the arterial ramifications which supply blood to this part of the skin, I quoted from Sir Erasmus Wilson's great work on the 'Disease of the Skin' to show that in man 'the hair took certain directions.' I then showed that the arterial ramifications of these regions were substantially in the same direction as the growth of the hair. Going further I reminded the reader that good authorities admit that the Escutcheon continues to increase in relative surface till the second or third gestation, or until the development of the udder, and consequently of the vessels supplying it, has reached its highest point."

Dr. Ellzey says: "How does any correlation exist between the quantity of blood so applied to the hair glands and the direction of the points of the hair?"

Dr. Salmon says: "As an explanation of the apparent correspondence between the direction of the hair and that of the arterial blood stream, I showed that the direction of the hair depended upon the inclination of the papilla from which it grows, and suggested that the inclination of the papilla might be the consequence of the continued impulse to which it is subjected by the blood in the minute artery, which comes to the summit of each one of these elevations."

Dr. Ellzey says: "Nor does any correlation exist between the blood supply of the lacteal glands and the secretion of milk. The amount of milk depends mainly on the structural character of the secreting tissues and its amount; the duration of the flow is mainly a physiological habit, and depends more on the milkmaid than on the cow. *This whole pretence is anatomically false and physiologically absurd.*"

Breeders listen! NO CORRELATION BETWEEN THE BLOOD SUPPLY OF THE LACTEAL GLANDS AND THE SECRETION OF MILK. But we will let Dr. Salmon reply, for Dr. Ellzey says that if he, (Dr. E.) has not sense enough to understand the subject, Dr. Salmon most certainly has."

Dr. Salmon says in same article: "Of course ALL are willing to admit that a vigorous circulation through the arteries of the udder, CORRESPONDS WITH a vigorous secretion of milk." \* \* \* "To say that the escutcheon is a 'sign of the vigor of the circulation of the lacteal organs,' is only another way of saying that it is a sign of milking capacity, for if we admit, as I at least am willing to, THAT A CERTAIN FORM OF ESCUTCHEON INDICATES SUPERIOR MILKING QUALITIES, we must also admit that it indicates a vigorous circulation in the lacteal organs, FOR THE ONE CANNOT EXIST WITHOUT THE OTHER." \* \* \* "The escutcheon doubtless has an anatomical and physiological basis, if we are acute enough to fathom it;" and Dr. Salmon then expresses the desire that the subject should be more thoroughly investigated—this would be a useless expenditure of time and money, as Dr. Ellzey pronounces the whole thing "false and absurd," and Dr. E. is — a scientific man.

One word as to the expression used by myself, that the Dr. had treated the opinions of others uncharitably. I leave it with your readers to say if they believe a Tindall, a Huxley, a Darwin, or any other scientist who had learned enough to know how little he really knew, would be guilty of characterizing the positive assertion of a brother scientist, that he had found certain truths which were capable of anatomical demonstration, as "false and absurd." JERSEY.

#### Sheep Notes.

Messrs. Editors American Farmer:

I herewith hand you the weights of fleeces of several fine specimens of my Cotswold sheep, clipped this day. I had hoped to send in a full report of my annual shearing for your June 1st issue, but have not sheared my main flock yet, but think I will realize twelve pounds to the fleece all around from ewes of two to four years old.

"Baron Thame," my imported ram (yearling), a winner at the Oxfordshire and three other leading fairs in England in 1881, clipped this day 23½ pounds of nice wool. I have two ewes, two and three years, that sheared me to-day 16 and 17 pounds. I have met with much success from advertising in your journal and hope for larger sales now that it has increased in its subscriptions and has awakened a more lively interest with stock breeders and farmers generally. My lambs are very fine, and having used noth-

ing but the best parents obtainable, I claim that my flock can't be excelled anywhere, both for wool and mutton. A great many of my lambs have gained one pound a day, or in other words, lambs at 60 days old will weigh 60 pounds carcass. I am much pleased with the high merits of your prize essays awarded to the different authors, and am sure that the stimulus offered to bring forth talent that has hitherto lain dormant will not only increase your subscriptions, but will be beneficial to your readers who carry out the suggestions and experiences set forth in them respectively. ED. C. LEGG.

Kent Island, Md., May 23d, 1882.

#### A Vermin Destroyer.

Messrs. Editors American Farmer:

I had been intending for some time past to write a few words in favor of what I consider by far the best known remedy for vermin on domestic animals, but have delayed as we often do in other matters, until seeing the remedy given in the last FARMER, copied from the *National Live Stock Journal*, I could stand it no longer without saying a few words in favor of "Little's Sheep Dip." About a month ago I was so unfortunate as to buy a few sheep and lambs with the wool on; noticing the lambs were very poor, I caught one and found that they were nearly eaten up with lice, or ticks, as they are frequently called. Never in all my experience have I seen so bad a case. I provided a half barrel, and put in it less than a pint of the "sheep dip" (all that I had), filled the tub half full or a little over with rain water, and commencing with the young lambs, thoroughly wetted every part except the face, and then pressed out all the mixture I could in an empty tub; as material was so scarce, the first four lambs were put in a box stall as finished, so as to be able to note the results after completing the job; perhaps an hour from the commencement, we caught one of the lambs, and on it found, certainly to speak in bounds, 500 dead lice, and not one that could move. In the course of a few days I had them examined once more, but could not find anything but a few of the old dead lice. While there is such an article as the above so constantly advertised, it seems like a retrograde move to recommend a mixture of two such very disagreeable articles to handle as tar and lard, even if they do as well as the Sheep Dip would.

THOS. J. LEA.

Montgomery Co., Md., May 25th, 1882.

[From the representations made to us by other parties, we can confirm what Mr. Lea says, and the portability, cheapness and efficacy of the Dip ought to bring it into use everywhere.—EDS.]

#### Mr. Shoemaker's Recent Jersey Purchases.

The Jerseys lately bought at the public sales in New York by Mr. Samuel M. Shoemaker and referred to in our last issue have safely arrived at "Burnside," that gentleman's handsome farm in Green Spring Valley, where they have attracted a great deal of attention from persons interested in fine stock, as was to be expected not less from the distinguished merit and beauty of the individuals than from the unprecedented prices paid for them.

We had an opportunity some days ago of inspecting these cattle, and we will say that they deserve a long journey to see by any one who has any fondness for such animals.

Princess 2d, the cow which will be famous, independent of any good qualities she may have, as the highest priced Jersey ever sold—having sold for \$4,800—is of rather large size for the breed, light fawn in color, with a remarkably deep, large and well-shaped udder, with good teats, squarely placed; a well-rounded barrel, large milk veins and a conspicuous and broad escutcheon.

We were informed that we were in error in our statement that she had not been bred again, as she is now believed to be safely in calf to Gold Coast, a son of her half sister, Ona. Oxford Kate, two years old, who was bought for \$3,550, is a beauty, approaching the ideal type of the Jersey. She is of more delicate frame than Princess 2d, with a clear cut head of marked elegance, shapely horns, a skin of great softness and elasticity, and a good udder and escutcheon. Her color is fawn and white; whilst her face has that placid, amiable expression, peculiar to the Jerseys. She is an animal which will attract attention anywhere, and will be a formidable competitor in any show ring.

Mahalia 2d, another of Mr. Shoemaker's late selections, having been purchased at \$275, now milking with her first calf, is a daughter of Polonius (the \$4,500 Alphea bull) and a granddaughter of Rex. She is a fine animal, of more than ordinary beauty and promise, dark gray fawn in color, with good head, udder and escutcheon. Her proximity to her higher priced neighbors somewhat dwarfs, perhaps, her own excellencies, but she has decided ones.

As we said above, there is much interest shown in the notable collection of Jerseys now assembled at "Burnside," and those who have a partiality for this stock should not hesitate to see them. Mr. Rücklefsen, the manager, is an enthusiast about his cattle, and will show them with much pleasure to those who call upon him. He certainly deserves great praise for the spirit with which he has carried out Mr. Shoemaker's wishes in collecting a herd composed not only of representatives of the choicest strains, but animals of such marked individual superiority as those now composing it.

Mr. C. Palmer, the well-known artist, is now at Mr. Shoemaker's, making sketches of some of these animals, and we hope before long to have the pleasure of placing before the readers of THE AMERICAN FARMER their portraits.

#### Arrival of Polled Cattle.

Since our last three of the Polled Angus or Aberdeen cattle of Mr. W. H. Whitridge, therein referred to, have arrived and are now on his farm in Baltimore county. They are fine specimens of the breed, and attract deserved attention from admirers of improved stock. The bull, Sir Eustace, was calved December, 1880, and is by Sir Maurice, the winner of many prizes at National and other shows; out of Elpin, who was by Elcho, a famous bull of the "Erica" family.

The heifers are Merrythought, two years old, by Rosario of Cragganmore, out of Mermaid, and Clarissa, by Young Viscount out of Maid of Orleans. The sires of these heifers are famous bulls, Young Viscount having never been defeated. He was purchased by Sir G. M. Grant, the breeder of these cattle, for 225 guineas, the highest price ever paid for a polled bull.

Sir Eustace gives promise of developing into a remarkably short-legged, heavy-fleshed bull, and the heifers bid fair to become fine cows. The other heifers purchased by Mr. Whitridge have not yet arrived.

#### Maryland Herefords for the West.

A large shipment of young Hereford bulls was made on the 20th ultimo by Dr. Wm. Henry De Courcy, of Queen Anne's, and Col. Edward Lloyd, of Talbot, to Messrs. Price & Jenks, of Fort Robinson, Nebraska, who will use them on their extensive ranch. This firm, for the past two years, have had contracts with the gentlemen named to take all the males produced in their herds, and these animals were delivered under that agreement. The Herefords have given these purchasers great satisfaction by their large size, hardiness, their easy-keeping qualities

and early maturity; and the demand is steadily increasing for them, so much so, indeed, that the owners of our Maryland herds have declined to renew contracts for the sale of their produce in lump, as heretofore, preferring to avail of individual orders and the best opportunities for sales.

Of this shipment fourteen head were bred by Dr. De Courcy, they ranging from seven to fourteen months. Col. Lloyd's numbered forty-three, including some grades, and ranging from ten to fourteen months. Eight head of the former lot weighed 5,600 pounds. These animals have been fed during the winter neither hay nor fodder, but have had the run of the straw yard and got a very small quantity of ear-corn. They were all in good condition and no doubt will give a good account of themselves used on the native cattle in the Nebraska ranges.

Dr. Charles H. Tilghman, of Talbot, also a breeder of Herefords, has just purchased from Mr. Erastus Corning, of Albany, N. Y., a two-year old bull, weighing 1,600 pounds, for \$300.

#### The Simpson Sale—Fashionable Families.

On the 24th day of May Mr. William Simpson, the owner of the celebrated Alphea bull, Mercury, and many of the pure Alphea cows, of Rex, and of other fashionable families of Jerseys, held his second annual sale, and realized for 37 lots an average of \$580. Among the lot were sold three daughters of Rex for an average of about \$550; two sons for an average of about \$212; three granddaughters, average about \$303; one grandson for \$175, or an average of about \$200 on males and \$427 on females, or on the Rex family of about \$351.

Of the Alphea family, nine females averaged about \$629; six males \$488; on the family an average of \$580; the highest figure being \$2,300 for a cow and \$1,650 for a bull.

Of the Coomassie family, one great-grandson and one great-great-grandson averaged \$675, or more than the females of either of the other families. Straws sometimes indicate the direction of the wind. We have always expressed great confidence in the Rex family, but must say that their popularity must wane unless their owners take the trouble to make and publish tests of their butter capacity.

And at the sale of bulls by P. C. Kellogg & Co., May 25th, two calves seven and nine months old, Lord of Mountainside, a grandson, and Sultan Carlo, a great-grandson of Coomassie, sold for \$1,500 and \$1,775 respectively, whilst the highest prices on other lots were \$470, \$310, \$250, and the remainder of more than 50 animals ranged from \$150 to \$20.

#### Acute and Chronic Colic.

Colic in horses is the result of so many different conditions that it is impossible to treat all in a short newspaper article. The most common cases are: Indigestion, with or without bloating; excessive and irregular contraction of the bowels as the result of a drink of ice-cold water; washing on of undigested material from the stomach as the result of a full drink of cold water immediately after a full feed of grain; an excessive feed of grain; disturbance of the digestion by musty grain or hay, or by the presence of worms in the bowels or blood vessels. Again, a sudden change of diet, or the use of a hard, fibrous, indigestible food may cause colicky pains. If musty, fibrous, or other hurtful food is continually given, then colic is likely to continue as a daily or frequent occurrence. The same persistence is noticed in cases due to worms, and when hard, feculent or phosphatic concretion have formed in the stomach or bowels. In most of these conditions the faulty diet must be first corrected and the irritant agents removed from

the bowels. A dose of five drachms of Cape aloe and one drachm powdered gentian root may be trusted to effect this. The patient may be fed bran mashes, and allowed only water with the chill off until the bowels have ceased scouring. If the pain is very severe, two drachms extract of belladonna and half an ounce ground ginger may be added to the above dose. In cases in which there is no manifest cause for indigestion, but where colic has supervened on a draught of iced water, the belladonna and ginger should be given promptly in a pint or quart of warm gruel. When worms are seen to pass with the dung, give daily for six days after the physic one drachm each of tartar emetic and copperas, and follow on the seventh day with a second dose of aloes. When recurring colic is due to solid concretions in the bowels, a fatal result is likely to follow sooner or later, though if the concretions are small they may be got rid of under the influence of a laxative diet and the use of belladonna or other antispasmodic when spasms come on.—Professor James Law, in *New York Tribune*.

#### Pasture for Hogs.

Farmers in the great hog-producing sections of this country are paying more attention to pasture for hogs now than heretofore. One who has given the subject no little study, and tried various experiments in that behalf says that there is no question about green oats and peas being a most appropriate food for pigs, and that it comes at the very season when pasture is apt to be short. Corn being the most universal fattening food for hogs in the West after cold weather arrives, it is very important that the summer food of pigs should be more nitrogenous and better adapted to the development of muscle and bone than corn. The pea is very rich in muscle and bone-building elements, and oats are also superior to corn in this respect. The oats also assist in holding up the pea vine, so as to prevent early lodging, and thus cause it to retain its succulence longer. The crop should be sown in the proportion of two bushels of peas and one of oats per acre, and well covered. The drill puts them in best. The united crop should produce from 40 to 60 bushels of grain to the acre. Now the grain is only part of the crop. The succulent pea vine is admirable food for pigs, and they should be turned in when the pea is just passing out of the milk. They will then devour the whole plant, and it contains as much nutrient as when fully ripe. The succulent stalk contains from 40 to 50 per cent. as much nutrient as the grain. A good crop ought to produce a growth in live weight on hogs of 500 to 700 pounds per acre.

GIVE charcoal to pigs occasionally; they eat it greedily, and it would be well to sift wood ashes to get charcoal for that purpose. Ashes, on so many farms are leached for lye, and then spread upon land from which pigs are excluded, that swine seldom get charcoal. Both charcoal and ashes are antidotes for fermentation in the stomach, and are especially beneficial and important while pigs are growing, or being fattened. A healthy digestion conduces to a healthy and rapid growth. On the other hand, there can be little gain when the stomach is flatulent and feverish; in that condition a proper assimilation of food cannot be expected, nor satisfactory results realized in raising swine.

THE greatest wool-growing county in the United States is said to be Washington county, Pa. It produces annually 2,500,000 to 3,000,000 pounds of wool, worth in cash \$1,000,000 for the wool alone, beside the sale of fine sheep for breeding purposes, and mutton sheep and lambs for the meat markets of the East.

#### Poultry Yard.

##### Keep Dry.

It cannot be too strongly urged on all engaged in raising poultry that dryness means warmth and dampness means cold, and hence the necessity of providing the one and avoiding the other. In our changeable climate, where one spring day is of summer temperature and brightness and the next of winter chilliness and gloom, the tender young life of a half fledged chick meets with a trial that must needs be fatal, at least to its best development, unless reinforced with such care as the object for which we are striving imperatively calls. As the development of a new species is not our aim, but the greatest amount of meat at the earliest age in condition for the market, the survival of the fittest does not concern us, consequently to leave the weak to die, trampled out by the stronger ones and succumbing to the elements, as is the practice of too many, leads to no good results, but rather to discouragement of our hopes, not to mention the loss to our pockets.

The timely counsels of many poultry keepers, derived from their experience and published for the benefit of others, if heeded, would save many a little life that had been ushered with bright prospects into a world of worms and insects, the crude material of many a tender broil, roast and fry. When the chicks have been hatched for twenty-four hours, they will begin to crave some food, the yolk taken in before emerging from the shell having been assimilated. Now make a tight board floor to fit inside the coop, on which spread a half inch of dry sand or earth to be sifted or renewed daily, the whole arranged on a raised platform of boards, and if convenient also covered by a good roof. A temporary shed open on all sides could be made especially for the purpose and be found profitable. While the chicks are still in the downy state they should be kept out of the dewy grass in the early morning—after feathering it does not matter.

It is a doubtful practice to place the coops directly on the ground, following the usual custom, as the writer has found to his cost, having lost several fine broods from the flooding summer showers of last year washing into the coops and chilling the young birds, causing them to die off for weeks after, thus opening our eyes to see that prevention is better than cure. After placing all our coops on platforms the thirst of the chicks was noticeable. Some that before seemed weak and puny gathered strength and made good birds. It is possible the dreaded gapes may be attributed to damp ground, but as the writer knows nothing of this scourge by experience can say nothing definite; but that the prevalence of lice, it is certain, is in reverse proportion to the strength or weakness of the victim, and what keeps the animal life at its maximum vigor enables it to resist adverse influences from all causes. Finally trust in good feeding and shelter, both above and below.

T. W. HOOPER.

#### The Management of Poultry.

On this depends your success, and unless you have patience, perseverance and a fancy for this branch of business you had better "go slow." First of all, prepare comfortable quarters for your fowls, so that you can ventilate well in the summer, and as winter approaches close up their quarters so as to keep them comfortable. Keep it clean and dry, just as you would your stable.

Second, do not crowd them; fifty grown fowls are a sufficient number for a run of one-third of an acre, and a hen house ten by twelve feet.

Third, avoid mites by whitewashing the quarters two or three times during the spring and summer months, and scatter fresh slack-lime promiscuously after sweeping out, which should be done at least once a week during the summer, and occasionally powdered sulphur.

Fourth, it is best not to let your hens sit in your hen-house, as mites or vermin are generated by sitting hens. Build a run near the hen-house, say five feet wide and in length in proportion to the number of hens you may wish to set, make it sufficiently high or cover it over so that the hens can not fly out: make the nests on one side, and as your hens begin to sit, after the second night, move them at night to the nests in the run, give them one or two eggs for a day or two, then after she has settled down to work take a handful of powdered sulphur and sprinkle through the nest, then give her as many eggs as she can cover easily, and about two or three days before she is already to hatch take another handful of sulphur and sprinkle through the feathers of the hen, also the nest. By this means the brood comes off without any mites or vermin, and consequently grow from the first. Keep plenty of food and water in the run, small and cooked food preferable, so as the the hens can come off and get it as they like, also a dusting place, ashes preferable. Make the nests as near alike and as dark as possible and well protected from the sun. During the summer months I use cooked food for their morning meal and small grain at night. For young chicks I chop onions very fine and mix in the meal before it is cooked about three times a week. The old ones will soon learn to eat the onions without cooking them. Let your fowls have access to plenty of fresh water, and once a week give them a tablespoonful of copperas to the gallon of water. After ten years' experience I have followed the above rules, for the past three years without a case of cholera. Have raised over four hundred chicks this season in a yard seventy-five feet by one hundred and seventy.—*Cor. Rural Sun.*

#### Horticulture.

##### The Orchard and Fruit Garden.

The present year, thus far, has been prolific in insect enemies to fruit and vegetable culture; we never knew the tent caterpillar to be more numerous; while at the same time the complaint against the peach aphis was never more widespread than it has been this spring. The caterpillar is easily destroyed, and there is no excuse for industrious fruit growers—and there are comparatively few who are otherwise—to have trees injured by the rapacious appetites of these worms. By an examination of the trees in early morning, before they have left their tents, the entire brood can be dislodged by the hand, either naked or gloved, and the life tramped out of the insects by the operator, thus quickly and effectually ridding the trees of these pests.

But how about the peach aphis? Here is an insect that infests both root and branch, multiplies with almost incomparable rapidity, is busy on the roots in the winter, enfeebling and even "killing outright" bearing trees in the peach orchard. In the spring wherever they appear their name is legion; newly set orchards in some instances we know of being almost ruined by these little black lice. We have tried many remedies to rid our trees of this pest in the spring, but find difficulty in applying anything of sufficient strength to kill the lice and leave the foliage uninjured. A strong decoction made by steeping tobacco in water has proven more satisfactory than anything else we have tried, but it is not thoroughly effective; then too, after the hot suns of summer drive them from the leaves, the instinct that leads them to take refuge under the ground on the roots

gives the insects the advantage in battle "by a large majority."

The late Col. Wilkins, in a communication to THE AMERICAN FARMER relating to the depredations of this insect some years ago, expressed it as his opinion that the disease of the peach commonly known as the "yellows" was to a large extent, if not entirely the result of the aphis infesting the roots of the trees; and after much careful observation and investigation in that direction since, we are strongly inclined to share or support that opinion. We have seen considerable of "peach yellows," and an abundance of "peach aphis," the weakened and sickly appearance of the leaves giving the tree a faded and consumptive look. The fungus on the roots are the same fatal indications in both cases.

But dropping peaches for the present, the pear slug will require looking after this month. And should their numbers be multiplied in the same ratio as those of the caterpillar, in comparison with last year, there will be "a bold front to fire on." Air-slacked lime dusted over the trees carefully, so that it hits the snail-like leaf-eaters, will dispatch them. We have used London Purple in solution with satisfactory results in ridding our pear trees of the slugs—the water should not be too strongly impregnated with this poison, or when syringed on the trees it will injure and kill the foliage. We only used the poisoned water for the destruction of the June hatched slugs; those that appear in August had better be destroyed by the application of lime, as the fruit on bearing trees of some varieties is ready for picking at that time, and if poison were used that month to destroy the insects there would be danger of poisoning those who eat the fruit, in particular the boys, as they are not generally aesthetic in matters of this kind.

By the time this number reaches our readers, many of them will be luxuriating in the luscious productions of the strawberry bed, and will be enabled to judge of the merits and demerits of some of the newer kinds in comparison with the old. As soon as the beds are done fruiting the plants should have the grass and weeds pulled or hoed out from amongst them, and the soil broadcasted with a good dressing of dissolved bone or some other good fertilizer, which should be worked into the soil around them with the hoe. If more plants are desired let the runners remain; if not, they can be cut off with the hoe while hoeing, from time to time. The weed-killing campaign should be prosecuted with unrelenting vigor. It requires the same soil-power to produce weeds that it does to grow other plants of same size. A weed with as much leaf-surface or area requires and exhausts the soil of as much moisture as a strawberry or other plant, so that it is a decided loss to grow weeds amongst fruits and vegetables. To most of our readers it is quite unnecessary, we know, to point out the bad economy there is in suffering weeds to sap the soil of plant food and drink, and therefore suspend further remarks.

#### Pleasure Grounds—June, 1882.

By W. D. BRACKENRIDGE, Florist and Nurseryman, Govanstown, Baltimore Co., Md.

Welcome lovely June, harbinger of roses and many flowering shrubs! All nature seems mantled in a more than usual lively green the present season, owing, no doubt, to the past protracted spell of cool, moist weather. The April frosts killed many of the flower buds of our small trees and shrubs. Those suffering most were the Magnolias, Forsythias, Spiraea and Wisterias, while at the time we write, the Japan and common Snowballs, with numerous Wigelia, are truly beautiful. We have noticed that variegated foliage trees and shrubs are less decided in their markings the present season,

but where the departure from the original type is of a solid color, we find that color to be of a deeper shade, as may be witnessed in the Purple-leaved Hazel, Barberry, Oak and Beech. The absence of continued bright sunshine of late may, in a measure, account for this.

The past spring has been an unusually favorable one for planting trees, and where the work has been done properly few or no failures should have occurred, yet we find men whose homes stand naked and exposed to sweeping winds, and when asked why they do not plant for shade, reply that they do not see much use in trees and that when they have planted the trees have died, whereby their zeal, if they ever had any in that direction, is snuffed. Now, such common reasons are false or ill-founded. It ought to be the object of every man to surround himself with objects of interest, to cultivate a taste for the beautiful in all things; it is of great use for a man to make his home a pleasant and happy one; it is of use that every child, as well as others by whom he is surrounded, should have the book of nature laid open to them, so that her language may be read in every flower and leaf, written everywhere in the valley and on every hillside, educating the restless spirit to refrain from all low species of vice so as to induce him to adorn their dwellings, public places of resort, streets, public squares, parks and lawns with trees and flowers, so that the heart may ever be impressed with a love for Him who made them all.

Owing to the wet spring, much labor has been expended in keeping the grass on the lawn down to a short nap. Frequent cutting and rolling has the effect of producing a close compact sod. Care should be taken to eradicate all pernicious weeds so soon as they make their appearance. In order to save labor in hoeing walks and roads, a bushel or two of refuse salt may be procured cheap, and if melted and applied with a water-pot or sown broadcast in hot weather, will kill all weeds, but be careful that none of it gets upon the lawn.

Spiraea, Wigelia and Forsythias should be pruned into shape with the knife so soon as the flowers fade; if this work is performed in spring much of the wood that produces flowers is sacrificed. Some people use the garden shears to do this work, but it leaves much dead wood behind, and besides it imparts to the bushes a moppish appearance. Attention should now be given to all summer plants that have lately been bedded out, observing that should the weather prove dry to give water at the roots, and if convenient to syringe them well overhead in the evening, so much the better, until such time as the plants have taken good hold of the ground. It is also of great advantage to plants newly set out to stir the surface of the bed frequently with the rake or hoe.

Whether the style of planting that has been adopted be the Ribbon, Mosaic, Diamond or Mixed order, in either case it will be found necessary very often to have recourse to pinching back such growths as interfere with any feature in the design. Some people form very handsome flower beds of Thunbergias and Maurandias, which they peg to the ground as the vines advance. Near dwellings and where the lawn is kept neat a very attractive bed may be had. Make the bed circular, in this form a star, filling the points with Echeveria secunda and plant in between the points with Alternantheras, placing in the centre of the bed a neat Yucca or Agave; or if it is thought that the effect would be better, then reverse the positions of the two plants named. The present is a very good season to plant out such a bed, and as the two kinds of plants named are of a dwarf habit, it would therefore be advisable to elevate the bed a few inches above surface of the lawn.

#### Kitchen Garden—June.

**TOMATOES.**—A good deal has appeared in this magazine during the past year concerning this crop, and it is to be hoped that many are experimenting with a view to have certain questions set at rest. These are the comparative influence on early maturity of early, or very early sowing (age); of pinching or non-pinching in the frame; of pruning or not in the field after sufficient fruit has set. I, for one, hope to know more about tomatoes this summer than I ever knew before, and will report in due time. Meantime I have a word to say about toughening the young plants. I notice that the Anne Arundel gardeners have suffered great losses by frosts, and many plants set out here on the 27th of April were also badly nipped, necessitating replanting, although none were absolutely killed. Now, in order to have plants proof against light frosts it is not enough to expose them to the weather in the frame, they must acquire substance by being grown in stiff, not over-rich soil. At planting time such plants will not have to be handled like eggs as those invariably are which have been pricked out in the light soil of the hot-bed, but may be handled almost as cabbage plants. Nothing but the labor of changing the soil in the beds prevents me from raising all my plants in this way. The few rows of such set out this spring did not show a trace of frost, whilst those grown in light soil suffered severely. Florists, who grow their bedding plants in small pots in stiff soil, understand the substantial nature of plants so raised. It is a great advantage to have well-hardened plants on hand in case we are favored with rain a few days before the usual date of planting, as experience tells us that the next shower may be weeks behind time.

**CELERY.**—If time will permit, it will pay well to prick out the young plants, say three inches apart, into a very rich bed for two or three weeks previous to transplanting. Though I much prefer the final setting out to be in single rows, it is well to have some in beds likewise. It is not safe "to put all the eggs in one basket."

**Don't Miss a Shower.**—One of the most important matters in the care of a garden is to be ever ready for rain. There is always something to transplant, and the aim should be to have hills prepared and drills marked off in good time. Although it is usual to transplant leeks, celery, cabbage, late tomatoes, etc., in July, there should be no hesitation in planting this month if land, weather and plants are in tempting condition. Winter beet may yet be planted, and to have them tender, manure should not be spared.

Much time will now be occupied in gathering early crops and in hoeing and thinning others. Use a narrow hoe on drilled crops; cut out superfluous plants boldly and afterwards single out by hand. Crawling along the drill and doing all the thinning in that way should be stopped. Ground should be manured broadcast for sweet corn, and much more liberally than where ears are to ripen, succulence being now our chief aim.

**PLOWING IN GREEN CROPS.**—I have seen the good effects of this practice too often to doubt of its great benefit to the succeeding crop, though I still adhere to the belief that its value as a manure is very trifling. The late Mr. Root, the well-known Western gardener, valued the turning down of rye as a medium to hold moisture, and that I think is the proper view, for gardeners at least, to take. "Fertilizers" do their work best in connection with barn-yard (bulky) manure because such manure has the property of retaining moisture, and it seems reasonable to suppose that the next best manner to apply them would be on land where a good sod of grass or rye or clover has just been turned down. Granted that the fermented product of a clover field has some manurial value on a worn-out farm, it would be a mere nothing

in bulk on a good truck farm; but if looked at as a medium for getting the full benefit of fertilizers it might find more favor in connection with gardening. I am merely reasoning out this matter before putting it to the test, as I hope to do soon.

**GIVING LAND REST.**—If land is impoverished and your inclination is to skin it still further, rest would undoubtedly be preferable, but to those who imagine that rest in the abstract is beneficial to land, familiarity with the incessant working of every inch of a good market garden would soon cause them to change their opinion. Rest for the soil is only compatible with cheap land and small means, except in the case of pastures in most cases, which are indispensable. The drouth of last Summer played such havoc with the strawberry plants that I almost despaired of a crop, but the mild winter and fine spring have worked wonders. Those who have anything to mulch small fruit with should not neglect it. It pays well in dry seasons, and we may say that all seasons are now dry.

**FLOWERS.**—In the way of these in the kitchen garden the "mixed border" is much to be commended over the formal beds. It is a place for everything in the flower line, whether annual or perennial, and by a little study everything may readily be put in its proper place. A few hardy roses and other shrubs may occupy the back, bedding plants in the middle and annuals in front. Hollyhocks, Dahlias and the like must of course take a back seat. The walk in front should have an edging of Thyme or Box. The hoe should be used frequently until the plants cover the ground.

JOHN WATSON.

#### Maryland Horticultural Society.

The May Show, held in the Academy of Music on the 25th, was hardly as large a display as is usual in that month, but comprised a number of handsome collections of plants with some notable arrays of floral designs and an extensive assortment of blooms of hardy shrubs from Mr. W. D. Brackenridge's nurseries. A central stand or pyramid in the midst of the tables was filled by a varied assortment of foliage plants from Patterson Park, the summit surmounted by a noble specimen of Dracæna Shepherdii, remarkably well furnished and handsomely colored.

The following awards were made: Best six Dracænas, \$4, best six ornamented foliage plants, \$4, best table design, \$5, best hand bouquet, \$2, Robert J. Halliday; best three Petunias, \$1, best six Zonale Geraniums, \$2, S. Feast & Sons; best six Pelargoniums, \$3, Alex. Scott; best twelve Zonale Geraniums, \$3, James Pentland; best collection cut blooms of hardy flowering plants, \$2, Wm. D. Brackenridge; best basket of cut flowers, \$3, John Cook. Patterson Park received special commendation for collection of finely grown plants handsomely arranged; Wm. H. Perot for basket of cut flowers and John Cook for bouquet of roses.

#### The Norfolk, Va. Horticultural and Pomological Society.

This Association held a very beautiful and interesting exhibition on May 23d and 24th, it being the best display it has ever made.

A large number of plants, cut flowers, strawberries, tomatoes, etc., were on exhibition as well as floral designs, hanging baskets, etc. An address was delivered on the first day by R. Devereaux Doyle, Esq. of Norfolk, who alluded to Mr. G. F. B. Leighton, the President of the Society, as the father of Pomology and Floriculture in that section. The exhibition was well attended, and much gratification was expressed at the resources of the exhibitors—the collection of cut flowers, notably roses, and strawberries being very handsome.

#### Home Department.

##### Housekeeping and Home-keeping.

We are to apt to consider the necessary work that the household requires nothing but drudgery. Do we, who have the superintendence of the housework, strive to make it just what it ought to be? It is the work of our homes, the most blessed work woman can do, for from our homes the influence goes out all over the land to make the rising generation better or worse.

It is not only housekeeping, but something more. It is home-keeping. It is not only the mechanical performance of a round of duties each day, but it is an art that brings into use all our latent ingenuity, and requires a keen sense of the beautiful, with firmness and perseverance to overcome all the petty trials and difficulties that are forever crowding around the path of the housekeeper.

Home-keeping is an art that requires just as finished an education and as thorough a practice to become an adept, as what is termed the "fine arts," but why the fine arts I know not, for if home-keeping is not one of the fine arts, what is it? To be sure, there is the coarser work the same as there is in everything. The painter must know how to properly clean his brushes and pallet, he must fix his paints and oils, and if the picture does not suit perhaps the canvas will have to be cleaned so as to commence again; but the toll is forgotten, for he works for an object; for a crowning beauty.

And should we not toil as unceasingly through all these little duties, doing faithfully, still not dwelling too much on the trivial, but through all keeping and recognizing a higher beauty that shall bless us while we labor and make life's picture perfect in its completeness? We cannot, like the artist, efface our work, for we are building for eternity. Let us then give the seemingly uncomely labors more abundant comeliness.

Order and harmony should be every housewife's motto, as the old saying, "a place for everything and everything in its place." I do not say that the bread should never be burned or the room never littered, for all these things will sometimes happen to the best of housekeepers. But I do say there should be neatness and order, not meaning that every chair should be set back as though it was glued there, and the whole house wear a look of primness and coldness that dispels one and dampens the spirits of every one that comes in, but that all things should be refined and perfectly natural, from the kitchen to the parlor, and all blend and harmonize in true beauty, without confusion or disorder. Every housekeeper can and should be just as much a lady as though she never entered the kitchen and partook of the labors therein.

Housekeeping does not exclude those other employments that have of themselves so large a share in our world. Music, drawing, painting and literary pursuits all have their place in the model housekeeper's domain, and help to make life and home beautiful.

The housekeepers and home-keepers of our land have a large field of labor. Oh, that they realized more fully the great and noble work, which, if entered into in truth and spirit would be theirs! Housekeeping has a direct influence on the inmates of the household, and remember that the influence of our homes, and the teachings and practice of home life act directly upon the nation, so if we would have our nation pure, upright and truly great, we must begin at our homes and make them pure, honest, and wholesome.

**CLEANING GLOVES.**—Black cotton gloves should be treated to a bath of scalding hot salt water before wearing. Hang them up to dry without wringing, and when they are almost dry, put them on the hand to stretch them and get them in proper shape.

## A Small and Tasteful Cottage.

In presenting this design we would urge upon our readers the advantages and necessity of employing an architect when any building is contemplated, and in this design of a little six room frame cottage what is said is verified. The house is a perfect square, being twenty-six feet four inches on each side, exclusive of the porches.

The first floor plan is a model of compactness, and at the same time, nothing is crowded in the least. You enter on a porch which extends across the entire width of the front, with the portion in front of the door covered, the remainder being an open balcony. The hall is ten feet square and allows the introduction of a beautiful flight of platform stairs; the latter are designed to have drop newels at all the landings, which adds greatly to the ornamentation of the hall.

A large window and the glass in the upper panels of the front doors make the hall an unusually cheerful one. The parlor and dining room have direct communication with the hall, as has also the parlor with the dining room. The parlor is provided with a fireplace and is well lighted. The dining room and kitchen are separated by a short lobby with a door at each end, which will exclude all smoke from the former. A nice kitchen, pantry, and closet, and a china closet for the dining room are provided. It can be seen by glancing at the first floor plan that every room has openings on two sides, which always secure a draft. The rear doors of the kitchen and dining room have transoms. The rear porch extends across the entire building, same as the front porch, with the exception of its being covered the entire length. In the second story the stairs land just in front of the window over the front door, and the hall also receives light from a window on the side. The three chambers and bath room on this floor communicate directly with the hall, and each room is provided with a nice closet.

The small portico in front shows plainly that under it is the place to seek an entrance to the house. The roof lines are well broken and the roof may be covered with shingles or slate. Taken as a whole, the building may be called plain, and hardly any one can object to the few ornaments by calling them ginger-bread work, as they are all of a solid and durable form. Any additional information may be had by addressing J. B. Legg, Architect, St. Louis.

## A Good Recipe.

A lady correspondent in Marion, S. C., writes: "Don't forget to publish once a year, anyway, the recipe for cure of consumption that came out in THE AMERICAN FARMER last year, calling for 4 ounces glycerine, 3 ounces alcohol, 3 ounces water and 1 grain morphine; and to blister the chest with tartar emetic ointment. We have had two cases of coughs in our own family of a year's standing completely cured; and we gave it to a number, every one of which pronounces it a blessing. I gave it to a consumptive friend in the last stages, and it relieved his hard spells of coughing very much. Even in whooping cough it is a relief. My father, who weighs every opinion, says that simple recipe is worth more than years of subscription money to your paper."

## Domestic Recipes.

WHITE SOUP.—Veal and chicken must be used for this soup, and the stock must always be prepared the day beforehand, having been flavored with two-chopped onions and a cup of cut celery or celery seed, and other seasoning proportions to suit the taste. On the day it is to be used, heat a quart of milk;

stir one tablespoonful of butter to a cream; and a heaping teaspoonful of flour or corn starch, a saltspoonful of mace, and the same amount of white pepper; stir into the boiling milk and add to the soup; let all boil a moment and then pour into the tureen. Three eggs beaten very light and stirred into hot milk without boiling make a still richer soup. The bones of cold roast chicken or turkey may be used in this way, and the broth of meat, if perfectly clear, can serve as a foundation, though veal or chicken is more delicate.

VEAL AND HAM PIE.—Take the thick part of a breast of veal, removing all the bones, which put on for gravy, stewing them long and slowly; put a layer of veal, salt and pepper, then a thin sprinkling of ham; if boiled, cut in thin slices; if raw, cut a slice in dice, which scald before using; then more veal and again ham. If forced-meat balls are liked, make some force-meat as for Windsor pie, using, if you prefer it, chopped hard-boiled eggs in place of chopped meat, and blending it into a paste with raw eggs; then make into balls, which drop into the crevices of the pie; boil two or three eggs quite hard, cut each into four and lay them round the sides and over the top; put in

about a gill of gravy, and cover the same as Windsor pie. In either of these pies the force-meat may be left out, and sweet-bread, cut up, or mashed.

CHICKEN CROQUETS.—Chop the white meat of a cold boiled chicken very fine; chop an onion very small and fry it with an ounce of butter; then add half a tablespoonful of flour; stir for half a minute; then add the chopped meat and a teacupful of good broth, salt, pepper, a pinch of nutmeg; stir for about two minutes; remove from the fire and stir in the yolks of two eggs; then replace it over the fire for one moment, stirring it well; add a few chopped mushrooms or two truffles, and turn the whole on tea dish to cool; when thoroughly cold (not before) mix well together and portion it out on the pasteboard, about a tablespoonful to each portion; roll up each portion to the shape of an egg; have bread crumbs ready and dip each croquet first into beaten egg and then into the bread crumbs, rolling them so that every part may be covered; fry in plenty of boiling fat, and drain carefully upon paper before serving.

BOILED CORNED BEEF.—This is much improved if cooked in plenty of water, and when thoroughly done, left until cold in the same water that it was boiled in. Lift the pot off the fire, and let the pot water and meat grow cold together. This will make it much more moist and juicy, besides tender and sweet, than if taken out and all the moisture in it dried out by standing and steaming until it grows cold. Hams, tongues, etc. should be cooked in the same way.

RICE FRITTERS.—Two cupfuls of cold boiled rice, one cupful of sweet milk, three eggs, eight tablespoonfuls of flour, half a teaspoonful of baking powder and half a teaspoonful of salt. Put two tablespoonfuls of lard into a pan, and when very hot fry the fritters to a nice brown, putting a tablespoonful and a-half of batter into each cake.

CREAM PUFFS.—Two eggs, one cup of sugar, half a cup of butter, one cup of sweet milk, two and a-half cups of flour, two teaspoonfuls of baking powder. Flavor with lemon. Split the cakes while hot, and fill with boiled custard.

VELVET CREAM.—Whites of four eggs beaten to a stiff froth; two tablespoonfuls each of sugar, currant jelly and raspberry jam. Beat all together briskly. Serve with or without cream. With cake it is a delicious dish for dessert.

## AGRICULTURE IN THE SOUTH.

## Needs and Opportunities.

BY TH. POLLARD,  
Ex-Commissioner of Agriculture of Virginia.

## IMPROVEMENT OF OUR LANDS.

We were discussing this subject in our last—a subject of vital interest to agriculture, and one that cannot be too much commented on. Farmers, as well as doctors differ, and it is only by the constant comparing of opinions, facts, and experiments that truth as regards any question of difficulty can be arrived at, and let it be remembered that all experiments are not truths. One experiment is scarcely ever sufficient, but there must be many to establish the truth of a proposition. Soils are somewhat analogous to the human constitution. Like the latter, they vary in their susceptibilities—the responding to the influence of remedial agents; different soils, like different people, requiring different treatment. In agriculture, as in medicine, and in the daily experiences of life, "one swallow does not make a summer." Many a credulous doctor has used a remedy—certain effects followed, and acting on the maxim of "*Post hoc, propter hoc*," he has jumped to the conclusion that the remedy has produced the result, while the true cause lies hid in the

recondite operations of nature; his remedy and the effects being as far apart as the poles. So in agriculture, an experiment is made, the result noted, and the confident farmer thinks the question fully settled, while in all probability another year's experience would result very differently; and particularly if the soils in the two experiments differ, as human constitutions differ, making so uncertain the action of remedial agents. This brings to mind the anecdote of a wise doctor who gave salt fish to a negro patient as a diet; he recovered, then he gave it to a white patient who died; the conclusion arrived at was that salt fish would cure a negro, but kill a white man. This wise doctor had carried too far the truth of the difference of constitutions.

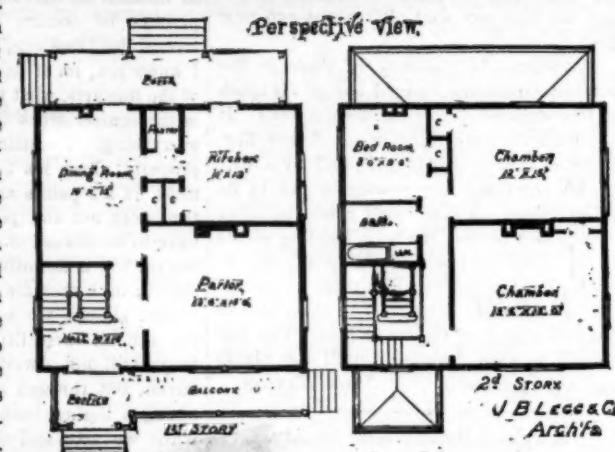
Not so many uncertainties and difficulties indeed exist in regard to the use of the means for improvement of lands and the application of fertilizers, as do in regard to the action of remedies on the human system; but there are some striking instances of the difference of action of fertilizing agents on different soils. For instance, gypsum, (sulphate lime), acts like a charm in Piedmont and the Western counties in Virginia, while in Middle and Tide-water Virginia, it more generally has no more effect than so much sand. Fertilizers with a liberal amount of phosphoric acid will fire the crops on light, sandy soil, while the clay soils will bear well the largest amount ever put in fertilizers. On some soils potash exerts no influence, while in others the effects are the best. We shall have more to say of this hereafter.

We have seen in a recent report, emanating from the N. Jersey Experiment Station, a statement that repeated experiments on the experimental farm there, prove that putrescent manures had no effect in increasing the yield of corn. If this is true it is marked contrast to the experience of Virginia farmers, who think themselves happy when they can get barnyard manures to put on their corn and tobacco.

This question was discussed at a meeting of Virginia Agricultural Society, in the fall of 1879, viz.: "Can the naturally thin, and partially exhausted lands in lower Virginia be utilized in existing large tracts in the hands of the present owners?" The writer was not present, but if the reports as published in the papers of the day, properly represent the discussion, it was an imperfect one. My opinion is that this question should be answered in the affirmative, with this proviso, that the owner of these large tracts is not in debt. If he is, he had better sell one-half of his land for any price he can obtain. If he cannot sell it, he had better give it away to any bona fide settler, and thus get rid of the taxes on it, and have probably a thriving neighbor. If he is not in debt, then let him "turn out" one-half of his land to grow up in pines, and to be thus recuperated by nature, and devote his time and means to the balance for cultivation and improvement. This is on the supposition that one-half of these large farms have heretofore been subjected to cultivation, with of course some open land and some wood land. If all wood land, then the wood and timber should be sold off if practicable, and the proceeds used in the improvement of the other half of the land. If I had to improve land grown up in old field pines, I would cut them down, let them remain on the land about twelve months, then clear up, leaving all the "pine tags" and twigs, possible on the land—avoiding burning them; then plow up well, and apply lime 50 bushels to the acre, or marl 300 bushels to the acre. This should be done in the fall and winter; then in the spring put the land in corn, working it as well and deep as practicable. Then follow the corn with winter oats or wheat, and early in the spring sow clover. If winter oats are seeded, sow (2 bushels to the acre), last of August or first of September, among the standing corn if



PLATE 68



not blown down, using first a cultivator to prepare a seed bed for the oats, and cover with one horse drag, having hoe hands to chop the oats in between the rows of the standing corn. Clover may well be sowed at the same time, and if it does not take, we have another opportunity in the spring to get a stand. This for winter oats, which we think preferable, but if it is determined to sow wheat, the corn had better be first removed and the wheat seeded, and the clover in the spring. Often spongy land is not apt to take clover well, and the early fall with oats is the best chance. If rye is wanted for soiling stock early in April, and it is admirably suited for this purpose, sow as indicated for oats, sowing clover at the same time. Rye, hugging the ground close, as it does, is the best protector of any other crop for clover, and it takes best with it. There is little doubt but what clover takes best if sown alone without other crops to interfere with it, and this either for fall or spring sowing. Where it is seeded with small grain, which has been shading it and that is removed, it is in tender condition; the sun in June and July comes down on it in full force, and a great deal of it perishes. Well, now if this pine land we have been speaking of will not probably be strong enough to take clover, what shall be done? Sow in peas at the last working of the corn; then sow in wheat as soon as the corn can be removed and the peas turned under, and try the clover early in the spring, or sow in rye or winter oats the last of August or first of September, as indicated above, and turn these under as an improver when they get their growth in the spring. The temptation will be very strong to use the rye or oats for feeding, but if the improvement of the land is the primary object, this must be resisted if the demand for feed is not urgent. If it is, cut the rye early for soiling, let a second crop come up, and turn that under preparatory to another crop; or if oats are seeded they may be cut when about ripe, and if the ground is broken up in a short time with a single plow, they will reseed themselves and make a good crop. I have now (25th May,) quite a good volunteer crop on a small piece of land, which was put in winter oats seeded 1st March 1881, which came up without any plowing of the land. By perseverance with green crops on land previously limed, almost any land may be gradually, certainly, and permanently improved. On land which will not produce a good crop of peas, phosphoric acid and potash in some form may be confidently relied upon to produce this result. Dr. St. Julian Ravelin, of South Carolina, informed the writer that his practice was to apply on the light lands of the South Carolina coast, what he called his "Ash Element," which is a compound of South Carolina phosphate finely ground and potash in some form, (we think kainite), then to sow to peas; this, he said, produces a fine growth of peas too heavy to be turned under properly; but as soon as they matured well and were drying up, he burned them off, plowed the land and seeded to wheat, which he was harvesting when our conversation occurred, and expected to make 35 bushels per acre. He said by burning he lost none of the mineral matter of the peas, and only the nitrogen of the tops, retaining that of the roots, which is probably the most important part of the plant; and no doubt some of the nitrogen of the vines is retained, as the combustion must necessarily be imperfect.

**ERRATA IN OUR LAST.**—For desponding rye, read rye, eleventh line from top. For using Gas-House lime *strictly* from the gas house, read *directly*, second line from the bottom of first column.

**DEDICATION OF GRANGE HALL.**—Denton Grange, No. 43, will dedicate its new hall at Denton on Wednesday, June 7th. W. Master Devries, of the State Grange, will perform the ceremony.

## The American Farmer

"O FORTUNATOS NIMIUM SUA SI BONA NORINT  
"AGRICOLAS." Virg.

PUBLISHED ON THE 1ST AND 15TH OF  
EVERY MONTH,

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1 Inch 12 lines } \$1.25	\$2.25	\$4.00	\$5.50	\$9.00	\$15.00	

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\* Subscribers who have minerals, ores, marls, fertilizing materials, or other substances, will be advised through our pages, by competent chemists, as to their composition, uses and value, by forwarding specimens to this office, *expressage or postage prepaid*. Questions as to application of chemical science to the practical arts will also be answered.

\* Persons desiring information or advice on diseases or injuries of domestic animals, will receive replies from a competent veterinary surgeon, by giving a plain statement of the symptoms, etc.

At the office of THE AMERICAN FARMER are located the offices of the following organizations, of each of which its proprietor, Wm. B. Sands, is secretary:

**Maryland Horticultural Society.**  
**Maryland Dairymen's Association.**  
**Maryland State Grange, P. of H.**  
**Agricultural Society of Baltimore Co.**  
Also, of the **Maryland Poultry Club**,  
Thos. W. Hooper, Secretary.

BALTIMORE, JUNE 1, 1882.

### Subscription Bills.

Our thanks are due to those of our subscribers who have promptly responded to the reminders of their indebtedness sent out in our issue of May 15th. To the others who have so far neglected to do so, we commend their example.

**READERS OF THE AMERICAN FARMER:**—We have in the excellent Prize Essays presented you a rich treat for you, as and your sons. The Essays are *prizeable* pens and experience of some of the most practical men in our own State and Virginia, and fill a peculiar place in the agricultural literature of this section, and cannot but have a most useful influence. They have been widely quoted and copied and their value has thus been carried far beyond the limits of our own circulation.

We have thus performed a most acceptable service, as we believe. It is for you now to ask yourselves whether you will do your part in giving further dissemination to this useful material among your neighbors. By getting up clubs of five or more the FARMER can be had at the almost nominal price of *one dollar a year*; and we can begin subscriptions with issues which will comprise all these Essays. *Will you do your duty to yourselves and to the FARMER?*

**DEATH OF JAMES VICK.**—The death is announced of this well-known seedsman and horticultural writer, who probably had a greater influence than any other single individual in this country in stimulating a love for gardening. He was English by birth, and came to this country about 1838. He was a man of genial manners, beloved by all who knew him personally.

### South Carolina Notes.

An old subscriber and friend in Darlington county, S. C., writes, May 25th, to THE AMERICAN FARMER:

"We are in the midst of our oat harvest, and the best and much the largest crop ever grown in this State is being housed. The terrible drought of last summer has taught a lesson I hope will never be forgotten.

I see in the county papers that farmers are sending specimens of their oats six and seven feet high, and heads 23 $\frac{1}{2}$  inches long—long heads for upland oats, and straw too long for any good.

Our wheat has rusted badly of late, and though still confined to the leaf, I fear it will shorten the crop considerably. The crop is now ripening, and next week will see much reaped.

Is the "Dallas" wheat grown with you? It is said to be rust-proof. I bought from a neighbor last fall, but find it is badly mixed, several varieties growing together and ripening at different times.

Before cotton came in, a great deal of wheat was grown here—our lands producing fine crops. I have made 28 bushels per acre without manure, harrow or roller—the grain merely sown on corn-land and plowed in. Better preparations would no doubt have increased the yield. How would a crop averaging 70 pounds per bushel do for Maryland? Such an one was grown on the Wateree river in this State.

Our last Legislature passed a stock law, compelling farmers to keep their stock enclosed. This has already given an impetus to the breeding of improved stock, and the Jerseys are and will be in demand. Those you sent me in 1872—the first in this part of the State, have made them great favorites here, and we have many fine cows, calves of the bull you sent. J. W."

[Wheat running 70 pounds to the bushel is above the average in Maryland. The Dallas is not grown here.—Eds.]

### The Maryland State Dairymen's Association

Held a meeting June 1st, at THE AMERICAN FARMER office, Mr. L. A. J. Lamotte, President, in the chair, and Wm. B. Sands, Secretary, the meeting being the most numerously attended of any held for the past two years. Attention was mainly directed to the miscarriage of the attempt to prevent the sale of unsound milk by legislation, and the general feeling manifested was one of regret, not to say indignation, that the Governor had refused to sign the milk bill, as it passed both Houses at Annapolis. Dr. John Morris, who was present by invitation, repeated some portions of the address lately delivered by him before the Maryland Academy of Sciences on the adulterations of milk, and enlarged upon those Sections which referred to the character and the effects on infant health of such milk as is produced from swill-fed cows. Resolutions of thanks were given Dr. Morris and also to Mr. Andrew Banks, the author of the bill to regulate the sale of milk, and all the members of the Legislature who voted for it. Preambles and resolutions were adopted reciting that, as sales of impure and watered milk were very large and are bringing discredit on honest dairymen, and as it is definitely settled that milk from swill-fed cows is unsound and dangerous as food for children, the State Dairymen's Association repudiate all connection with or responsibility for it; that it denounces all tampering with or adulteration of milk, as well as the feeding of swill to cows, inviting the closest scrutiny of milk furnished by its members. Also warning consumers, that, as there is no law to protect them, only the greatest watchfulness on their part will prevent imposition being practiced upon them, and that unless they refuse to buy swill and depleted milk, honest producers will be driven out of the market.

Another resolution was unanimously adopted that the interests of honest producers and consumers equally called for the proposed legislation, "and that the action of Gov. Hamilton in defeating the bill tends to the profit of a few individuals as against the interests of public health and public honesty, and also against the popular will as expressed through the Legislature." A committee of five was appointed to consider the advisability of holding a public meeting and securing the delivery of practical addresses by physicians, hygienists and philanthropists who have investigated the subject, in order that the public sentiment may be directed against the evils which accrue from the employment of unsound and adulterated milk as food for the children of our city.

### The Grange.

#### National Lecturer's Communication.

#### SUBJECTS FOR SUBORDINATE GRANGES FOR JUNE.

**Question.**—How are we to add dignity to labor, as taught in the manual?

**Suggestions.**—Would He who created and holds all things in his hand have assigned man to anything undignified? Instead of man being left idle and inactive, the Creator, in His wisdom and goodness, assigned him to higher dignity and greater usefulness than to be idle and a useless incumbent upon the earth. Hence, labor must then have been dignified. Is it less dignified now? Only so in our imagination. Our fancy, habits, early training, education and prejudice may have inculcated in our minds the idea that labor is undignified. But imagination is no proof, prejudice is not argument; habits or opinions conceived in error, however honestly formed and ever so firmly fixed, remain errors nevertheless, and can therefore not change the fact that labor is dignified. Indeed, our prosperity and well being, yea, our very existence, depends upon labor, and without labor all would perish. Labor produces the happiness, prosperity and welfare of the people. Any element or cause that can distribute such blessings as these so universally and so bountifully is noble, elevating and of high rank, and therefore dignified.

Laborers may prostitute themselves, but this does not debauch their vocation, nor their fellow-laborers, any more than a professional man committing a crime should make all professional men criminals. A professor of religion may prove to be a hypocrite, yet true religion remains pure. So with labor, it bears the same dignity now that was given to it in the beginning, and we, by our acts, examples and precepts are to make it more dignified, and remove the erroneous idea that it is undignified. One of the noble acts of man is that he earns his bread with dignity by the sweat of his own brow; a Christian virtue that woman dignifies the labor of her own household.

### Foreign Notes.

From our Paris Correspondent.

**FERTILIZERS.**—M. Marguerite draws attention to the great waste of blood when it can render such invaluable services as a manure. A preparation of sulphate of iron, 1 quart to 20 of blood, will convert the latter into a cake, which when dried, either by pressure or heat, will readily pulverize and contain from 10 to 12 per cent. of nitrogen.

The employment of superphosphate as a complementary manure up to the present found but little favor among tillage farmers of calcareous soils in the South west of France. M. de Gasparin, the eminent chemist, has investigated the subject, and found that when the phosphate was scattered on meadow land, so as to be followed by a slight rain or heavy dew, the results were eminently satisfactory. The phosphoric acid in the superphosphate in question, was in the form

of phosphate of iron; but the acid is as capable of entering into vegetation in this state, as if combined with lime—iron playing an important part in the skeleton of cultivated plants. Conclusions: that in calcareous soils, superphosphates with base of iron, answer well—a fact of great importance.

Professor Märcker, of Saxony, recommends manures containing 168 lbs. of soluble phosphoric acid, and 66 lbs. of nitrogen per 24 acres for potatoes; for sugar beet, the same dose of acid and double the quantity of azote. Dr. Wildt of Posen, recommends nearly the same formula.

**CLEANING SEEDS.**—M. Röber, a Swiss gentleman, has improved a winnowing machine for separating clover and lucerne seed from dodder, and which is highly spoken of by disinterested persons who have witnessed its working. The seed passes through a series of movable drawer screens, and is brought up into a drum, after passing through a regulated current of air, which carries off the lighter seed of the parasite. The machine can be adapted to purify other seeds. A machine has been produced in Hamburg for making "wood wool," suitable for littering purposes, and claiming superior advantages over saw-dust. It converts chips of every kind of wood used in work shops, into a sort of fibre or flock.

**BEET AND GRAPE PROSPECTS.**—The prospects of the beet crops are very brilliant, and the area of land under the root is this season largely in excess of previous years. For the success of sugar beet, the selection of good seed has become an axiom.

The vines commence to bud and leaf, so that in a few weeks one will be in a position to determine the new progress made by the phylloxera. Vineyard proprietors struggle energetically against the malady. It is proposed to apply the 300,000 fr. voted by the Government some years ago for the discovery of a perfect cure, to supplying sulphuret of carbon, etc., at a reduced price. It has been remarked, that when American stocks are employed, care should be taken that their origin will coincide in point of climate with that wherein they are to be employed. The wheat crop is excellent, the only danger to be apprehended is a too-rapid vegetation.

**Time, that great arbiter of all things,** has fully demonstrated that for headache, nervousness, dyspepsia, constipated bowels, diseases of the liver, chills and fevers and all bilious affections, J. M. Laroque's Anti-Bilious Bitters, is the most potent remedy of the age, 25 cents a paper or \$1 a bottle. For sale by all druggist. W. E. Thornton, proprietor, Baltimore, Md.

"Like a Charm."

COLUMBIA, S. C., Feb. 15, 1881.  
H. H. WARNER & Co.: Sirs—I have used your Safe Kidney and Liver Cure in my practice as a physician, and in every case I find it work like a charm.

REV. B. F. PORTER.

### Baltimore Markets—June 1.

**Flour.**—Quiet, holders being willing sellers, but not urging their stocks. We quote: Howard Street Super \$4.25@4.50; do. Extra \$4.75@5.75; do. Family \$6.00@6.75; Western Super \$3.25@4.50; do. Extra \$4.75@5.75; do. Family \$6.00@7.00; City Mills Super \$3.25@4.75; do. Extra \$5.0@6.0; do. (RioBrands) Extra \$7.25@7.37; Rye flour \$5.00@5.25; Corn Meal \$1.95.

**Wheat.**—Southern is dull. We quote: Cash 120@125%; July, 121@121%; August, 117@117%; do. lumber 118@118%; S. Fults, 125@125%; Long Berry, 140@144.

**Corn.**—Quiet and fairly steady. Southern is slow and the market is quiet. White sold at 9¢ in small lots and 90 c. bid for cargoes. Yellow is lower, with small daily sales at 8¢. We quote: Cash 75@80; July, 80@80; August, 79@80%; S. White, 90@91; S. Yellow, 83.

**Oats.**—Dull and nominal. We quote: Western mixed \$6@61; do. bright 61@62; do. white 62@63; Pennsylvania 60@63; Southern 60@63.

**Rye.**—Dull. Fair to good Western were sold to day at 78@80cts.

**Mill Feed.**—Fairly active and prices steady. Western is quoted at \$18@20 per ton for Bran and \$21@22 for Middlings, and City at \$22.

**Hay and Straw.**—Hay is dull and Straw is steady and some kinds are scarce. We quote: Cecil county Timothy 21@22, Maryland and Pennsylvania Timothy 21@22, New York and Western 21@22, mixed 21@22, and Clover nominal. Straw is quoted at \$10@10 for wheat, \$10 for oat, \$10@10 for long rye, and \$14 for short oat.

**Provisions.**—Quiet and rather easy. We quote: Bulk Shoulders, packed, 9@10 cts; do L. C. Sides, 13@14 cts; do C. R. Sides, do 13@14 cts; Bacon Shoulders, do 10@11 cts; do C. R. Sides, do 13@14 cts; do Hams, sugar-cured, 15@16 cts; do Shoulders, do 11@12 cts; do Breasts, do 13@14 cts; Lard, refined, tierces 12@13 cts; Mess Pork, per bbl., new, \$21.00; old, \$20.00.

**Butter.**—The offering of fresh grass stock is more liberal and the market is easy. We quote as follows: New York State, choice, 28@28 cts; Creamery, prime to fancy 20@23 cts; N. W. dairy-packed, choice 20@21 cts; Western, choice, 18@20 cts; do good to prime, 15@17 cts; Near-by receipts, 15@18 cts.

**Eggs.**—Firm at 22 cts. per dozen, with light supply.

**Poultry.**—The receipts for chickens is constant and the market is steady to firm at 10@11 cents per lb. for old, and 30@35 cts. for young.

**Cheese.**—The arrivals of new are liberal and the market is steady and fairly active. New York State is quoted at 12@13 cts. for fancy, and 11@12 cts. for good to prime, and Western 11@11 cts. for choice, and 10@10 cts. for good to prime.

**Wool.**—unwashed, per lb. 25@28 cts; do tub-washed, per lb. 35@38 cts; do Merino, washed, per lb. 35@36 cts; do do unwashed, per lb. 25@24 cts.

**Cotton.**—Quiet. We quote: Good Middling 12@13%; Middle 12@13%; strict low middlings 11@12%; low middling 11@12%; strict good ordinary 11@12%; ordinary 10@11%; ordinary 6@7@8%.

**Tobacco.**—Leaf.—Firm. We quote: Maryland interior frosted \$2.00@3.50; do sound common \$4.00@5.00; do good common \$5.00@6.00; do middling \$5.50; do good fine red \$8.50@10.00; do fancy \$10.00@12.00; upper country \$4.00@10.00; do ground leaves \$3@8@.

**Live Stock.**—**Beef Cattle.**—There has been a very light offering this week, but at the prices it is about equal to the demand. We quote: Very best on sale this week 8@9 cts; that generally rated first quality, 7@8 cts; medium or good fair quality, 6@7@8 cts; ordinary thin steers, oxen and cows, 4@5 cts; extreme range of prices, 4@9 cts; Most sales were from 7@8 cts; milk cows are quoted at \$35@45 per head, and quite dull. **Swine.**—The supply is fully equal to a rather limited demand at the improved quotations, 10@11 cts, with most sales from 10@11. **Sheep and Lambs.**—There was an excess of both common sheep and lambs, as there was last week, and few good ones among the offerings to day. Good stock was in active demand while common was difficult of sale at almost any price. We quote sheep at 20@25 cts. for common to good, while extra good sold at 5@6 cts; of these there were very few indeed. Lamb sold at 6@7@8%.

### Death Distanced.

ALEXANDRIA, Va., Aug. 4, 1881.

H. H. WARNER & Co.: Sirs—I should have been in my grave to-day had it not been for your Safe Kidney and Liver Cure.

MRS. BURGESS.

### JERSEY BULL Island Valeur, 5514.

THIS handsome young bull will be permitted to serve a limited number of approved cows at \$25 each. Cost of keep of cows \$2 per week at owners' risk.

Island Valeur is a grandson of Ona, probably the best of the granddaughters of Coonassie, having made 17 pounds 4 ounces of butter in 7 days when 3 years old. Two granddaughters of Coonassie recently sold in New York at auction for \$4,800 and \$3,750, while a great granddaughter brought \$2,550, the highest price ever paid for Jersey cows. The \$4,800 cow was a half-sister of Ona, while the \$3,750 cow was a daughter of a brother of Ona. The Coonassie blood is the most popular in this country, as shown by the fact eight animals of this family sold at auction for an average of \$2,625, while 4 averaged \$3,666, 3,000, being the highest price ever paid for Jersey cows.

WATTS & SETH,  
28 St. Paul Street, Baltimore, Md.

### To FARMERS & STOCK OWNERS

TRADE MARK

THE ATTENTION OF FARMERS, STOCK OWNERS DAIRYMEN AND POULTRY KEEPERS is called to the SPECIALTIES made by

The Reticker Manufacturing Co.

**1. The Indian Condition Powder.**—Under many powders now on the market, which act on y as a stimulant, these powders, an entire vegetable compound, possess the qualities of a tonic—invigorating and developing the natural powers of animals, and being a mild purgative to keep the system in a healthy condition, enabling the animal to do more work and to resist the approach of disease. To dairymen these powders are invaluable, largely increasing the yield of milk, enriching the cream and adding greatly to its butter-yielding properties. When used on dairy farms it has everywhere given most complete satisfaction.

**2. The Indian Ointment.**—For the cure of cuts, sores, and all skin diseases on man or beast. The healing properties of this ointment when applied to sores of the longest standing are perfectly marvelous, allaying the inflammation at once and working a cure after a few applications.

**3. The Reticker Chicken Food.**—For prevention and cure of all diseases incident to poultry yards. Poultry keepers find, after brief trial, a very large increase in the production of eggs, and marked improvement in the weight and appearance of fowls. As a promoter of growth in young fowls it has no equal, keeping them in health and free from vermin.

**4. The Shepherd's Lotion.**—A chemical preparation for prevention and cure of scab, rot, &c., in sheep and swine. This preparation needs only a trial to prove its worth.

One-pound box samples of the Condition Powders or Chicken Food, or a sample box of the Ointment, will be forwarded to any address, post paid, on receipt of 25 cts. in stamps or currency. Address for samples or circulars: The Reticker Manufacturing Co., 1704 Wylie Street, Philadelphia, Pa.

Bulk Shoulders, packed, 9@10 cts; do L. C. Sides, 13@14 cts; do C. R. Sides, do 13@14 cts; Bacon Shoulders, do 10@11 cts; do C. R. Sides, do 13@14 cts; do Hams, sugar-cured, 15@16 cts; do Shoulders, do 11@12 cts; do Breasts, do 13@14 cts; Lard, refined, tierces 12@13 cts; Mess Pork, per bbl., new, \$21.00; old, \$20.00.

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The Boiler the Safest and most Economical of Fuel made.

STATIONARY Steam Engines and Boilers, Patent Portable Circular Saw Mills, Sash, Muley and Gang Saw Mills, Flour Mill Machinery, Grist Mills, Shafting, Pulleys, &c., &c. AGRICULTURAL ENGINES A SPECIALTY. Lath, Shingle and Barrel Machinery, Lefell Turbine Water Wheels, Wood Working Machinery, all kinds; Tanite Emery Wheels and Grinders, Circular Saws, Saw Gummars, and Tools and Mill Supplies generally. Agents for NICHOLS, SHEPARD & CO'S VIBRATOR THRESHING MACHINES. COMPLETE THRESHING OUTFITS FURNISHED. Send for Descriptive Catalogue and Reduced Price List.

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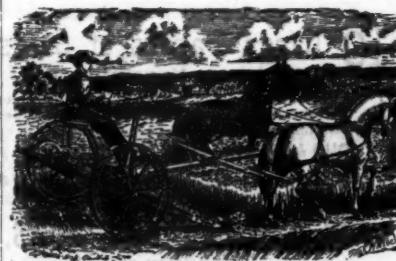
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Oliver Chilled Plows

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Malta Shovel Plows. Iron Age Cultivators. Corn Drags. Cahoo Seed Sowers. Planet Seed Drill and Cultivator. Hagerstown Grain Drills. Monarch Grain Drills. Farmer's Friend Grain Drill. The Star Horse Rake. The Victor Horse Rake. The Hagerstown Horse Rake. Bullard's Hay Tedder. Foust's Hay Loader. American Hay Elevator. Doubt's Harpoon Hay Fork. Philadelphia Lawn Mowers. McCormick Iron Mowers. McCormick Imperial Reapers. McCormick Twine Binders. Farmer's Friend Corn Planters. Keystone Corn Drills. Hay, Straw and Fodder Cutters.

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CAN now back and forth on same side of field. Will cut a six-foot swath as easy as a side cut machine will cut four feet, and with less draft. It also leaves the grass in such condition, that it will cure in much less time. Send postal for illustrated circular.

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1882.



TWELVE SIZES FOR HAND USE,  
Weighing from 21 to 51 lbs.  
THREE SIZES FOR HORSE POWER.

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MEMBER of the Royal College of Veterinary Surgeons, London. Treats all Diseases of Horses, Dogs and Cattle. Spacious Infirmary Stables and Operating Shed.

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A T moderate price, if taken soon, two thoroughbred SHORTHORN CALVES, Roans.

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CABINET CREAMERY.

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Potato Bugs or Tobacco Worms,

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Dealer in

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A GOOD FARMER must be Jack-of-all-trades, but the most important thing about a farm is to have the buildings well painted. And the art of painting is not in knowing how to spread it on (as this is soon learned), but the mixing is the important point; as great care should be used in the manipulation and selecting of oils, dryers, pigments and minerals that enter into its composition. Now, all this is made easy by using the H. W. JOHNS ASBESTOS Paint, which is ready mixed for the brush. Made of pure oil, and has a body equal to two coats of white lead. Send for particulars, color sheet and reduced price list to

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DEALER IN ALL KINDS OF ASBESTOS MATERIALS.

## GILPIN'S VEGETABLE LIVER PILLS

ARE prepared, with great care, from medical plants; are coated with sugar, that they may be taken by the smallest child and upon the most delicate stomach; are intended especially to act upon the Liver, thereby relieving all such diseases as COSTIVENESS, HEADACHE, PARALYSIS, DYSPEPSIA, COLDS, JAUNDICE, and all diseases of a bilious origin. No better evidence can be offered in favor of these Pills than the very fact that where their ingredients are known to family physicians, they are using them in their private practice. We append the following from one of our most prominent physicians:

OAKLAND, June 28, 1859.—Dr. Gilpin: After carefully examining the formula of your Sugar-Coated Pills, I feel it but justice to say that the combination is certainly perfect, and comprises the only remedies I ever believed were the proper ones to be used in diseases of a bilious origin. I shall take pleasure in recommending them, not only to my patients but the entire medical profession. Yours truly, J. M. WISTAR, M.D.

From one of the leading retail druggists of West Virginia:

WESTON, W. VA., June 18, 1869.—Nearby, Gilpin & Co.—Gents: Please send by express twelve dozen Gilpin's Vegetable Liver Pills. I have the most flattering accounts from all who have used them, and believe the day is not far distant when they will supersede all others. Yours, F. M. CHALFANT.

We could fill several pages with certificates, etc., from prominent men throughout the country, but prefer to let the Pills in the future, as they have in the past, rest entirely on their own merit, knowing that wherever they are known their use will pass down from generation to generation.

GILPIN'S VEGETABLE LIVER PILLS are sold by all respectable druggists and country store-keepers throughout the United States and Canada.

Principal Depot, CANBY, GILPIN & CO., Baltimore.

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## London Purple

Potato Bug  
Poison.

IF nearest dealer has not got it, write to HEMINGWAY'S LONDON PURPLE CO. (LIMITED),  
P. O. Box 990, No. 90 Water Street, New York, who will send prices and testimonials.

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GREENMOUNT GARDENS,  
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Opposite the Entrance to Greenmount Cemetery, BALTIMORE.

KEEPS constantly on hand a choice assortment of healthy and well grown Plants. His stock of Bedding Plants is extensive and in splendid condition. At our store No. 27 N. CHARLES STREET, a collection of Plants and Flowers may always be found. Choice Bouquets, Funeral Designs, and designs for the decoration of rooms, tables, and for everything for which flowers are used, put up in the most artistic style of the art, at short notice, and at charges that will compare favorably with any in the country.

## Jersey Red Pigs.

From Largest Herd South, which took  
Five Premiums and Special Mention  
at Virginia State Fair, 1881.

THIS hog is free from disease, a natural grazer, prolific and early to mature. Catalogue free. Also, COLLIE PUPS in April, from imported strains.

T. LOVELOCK, Gordonsville, Va.

## Cottage Home Brahma Yards.

IGHT Brahmans exclusively. I breed as a pastime and pleasure, keep none but the very best, offer no refuse stock for sale. My birds for size, marking and laying qualities, are unsurpassed. Have never failed to win first prizes whenever exhibited. A few nice birds for sale now, and at all times.

Address, Dr. Geo. H. Cairnes,  
No eggs for sale. Woodberry, Balto. Co., Md.

\$777 A YEAR and expenses to Agts.  
Outfit Free. Address—P. O.  
Vickery, Augusta, Me.

\$66 a week in your own town. Terms and \$5  
outfit free. Address  
H. HALLETT & CO., Portland, Maine.

GEORGE O. STEVENS,  
**WINDOW SASHES, BLINDS & DOORS**  
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 LIGHT STREET.

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KEEPS IN STOCK AND FURNISHES TO ORDER: Window Sashes, Doors, Blinds, Mouldings, Brackets, Hand Railings, Balusters, Newel Posts, Bracket Shelves, Barge Boards, Window Caps, Door Caps, Pews and Church Work, Blinds, Hinges, Built-ers' Hardware, Wood Mantels, Window Frames, Door Frames, Paints, Oil, Putty, Glass, Lumber, Bricks, Lime, Sash Weights, Sash Cord, Porch Columns, Tree Boxes. The Best Work at Lowest Prices.

JOSHUA THOMAS,  
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**Agricultural and Mill Machinery**

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FIRST PREMIUM WHEREVER EXHIBITED.



Best, Cheapest,  
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Buffalo Pitts Thresher and Cleaner,

The old standard, and still ahead of all competitors.

**KIRBY AND WHEELER MOWERS AND REAPERS,**  
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 A Full Line of Harvesting Machines, adapted to the  
 wants and taste of Farmers any and everywhere.

Union and Hagerstown Grain and Fertilizer Drills, Circular Saw Mills, Chieftain Horse Rakes, Portable Grist Mills, Millstones, Smut Machines, Bolting Cloths, Buckeye Force Pump, Mill Picks, Leather and Gum Belting, Cucumber-Wood Pumps, The Watt and Ball Plows, &c., &c.

Prices and Descriptive Circulars on application, and correspondence solicited from all wanting anything in my line.

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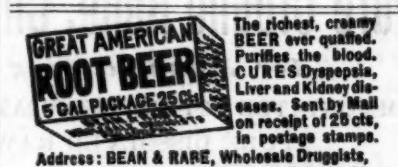


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*Ino. C. Whitner.*

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*G. W. Brooks.*

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We are now offering to the trade the following **WELL-KNOWN BRANDS OF GOODS**, which we guarantee fully up to the standard:

**SLINGLUFF'S DISSOLVED GROUND BONE,**  
 Containing 8 per cent. of Ammonia.

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 Containing 40 to 44 per cent. Soluble Bone Phosphate.

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 Containing 28 to 32 per cent. Soluble Bone Phosphate.

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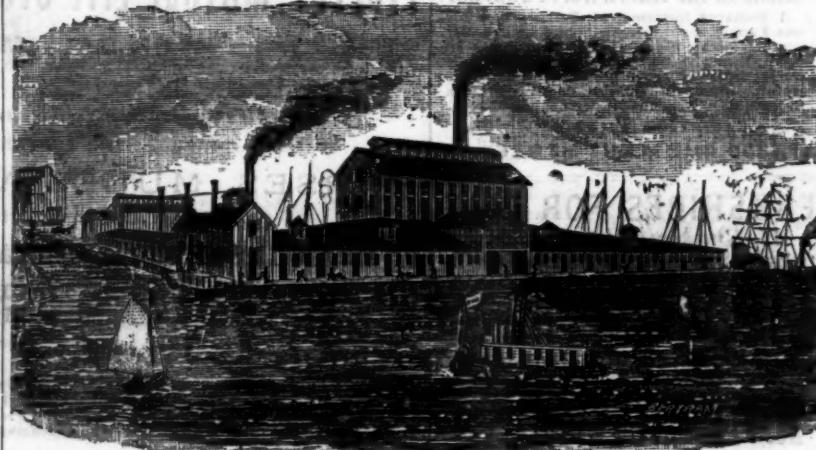
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 Prepared entirely from Animal Bone, highly ammoniated. Also,

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 This we can confidently recommend as one of the best fertilizers sold in the market at the price.

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